



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/581,982

06/07/2006

Roberta Marzolla

MI 6152 (US)

7222

34872

7590

08/04/2009

Basell USA Inc.

Delaware Corporate Center II

2 Righter Parkway, Suite #300

Wilmington, DE 19803

EXAMINER

GUGLIOTTA, NICOLE T

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,982	<b>Applicant(s)</b> MARZOLLA, ROBERTA	
	<b>Examiner</b> NICOLE T. GUGLIOTTA	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1 - 8, 10 is/are rejected.
- 7) ☒ Claim(s) 1, 4, 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Examiner's Note*

Examiner acknowledges the amendments made to claims 1 & 5, in addition to newly added claims 6 – 10.

### *Claim Objections*

Claims 1& 4 are objected to because of the following informalities: Examiner believes “from 0.75 to less 1.53 mol %” should be “From 0.76 to less than 1.52 mol %.” Appropriate correction is required.

Claim 8 is objected to because of the following informalities: Examiner believes “resepect” should be “respect.” Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**1. Claims 1 - 8 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (US 2005/0106978), in view of Knoepfel et al. (US 2004/0058802).**

In regard to claims 1, 2, 5 - 7, Cheng et al. disclose a nonwoven fabric made from 2 polymer blend compositions, using a Ziegler-Natta catalyst. The first polymer composition (FPC) comprises a random propylene copolymer and at least one

Art Unit: 1794

comonomer selected from ethylene, C<sub>4</sub>-C<sub>12</sub> alpha-olefins, and combinations thereof (¶ [0087]). Examples of alpha-olefins include hexene-1 (¶ [0121]). The FPC has a melt flow rate (MFR) of 10 dg/min or less (¶ [0105]) and an (average) molecular weight distribution (Mw/Mn) ranging from 2 to as much as 40 (¶ [0095]).

Cheng et al., however, are silent in regard to the amount of 1-hexene (hexane-1) present. Knoepfel et al. disclose 0.2 – 10 mol % 1-hexene in a polymer blend with ethylene for manufacturing fibers (¶ [0015]) using a Ziegler-Natta catalyst (¶ [0003]). Knoepfel et al. disclose this concentration produced polymers with good settling efficiencies ([0016]), utilized for making fibers, using a Ziegler-Natta catalyst. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate 0.2 – 10 mol% 1-hexene as the alpha-olefin of Cheng et al. as this concentration, when using a Ziegler-Natta catalyst, produced polymers of good setting efficiency, as taught by Knoepfel et al.

In regard to claim 3, it would be reasonable to believe the copolymer disclosed by Cheng et al., with the alpha olefin specifically a 1-hexene, as disclosed by Knoepfel et al., would be soluble in xylene at room temperature due to the similar properties of the copolymer with Applicant's claimed invention. In addition, Examiner notes the presence of xylene as a solvent is not required by the limitations of claim 3.

In regard to claims 4 & 10, Cheng et al. disclose a second polymer component (SPC) component corresponds to polyolefin (B). The first component comprising from 5% to 99% by weight based on the total weight of the composition of a polymer. Therefore, the second component is in the range of 1 - 95% by weight of the

Art Unit: 1794

composition), which is “up to 80% by weight” (claim 4) and encompasses the range 0.05 – 20% by weight (claim 10, #2). SPC is a copolymer of propylene (¶ [0118]), copolymerized with one or more alpha-olefins. Such alpha-olefins include ethylene, as well as alpha-olefins containing 4 to 12 carbon atoms (¶ [0120] - [0121]).

In regard to claim 8, Cheng et al. disclose ethylene units may be polymerized with the propylene and alpha-olefin, and would be present in a lower limit amount of 2% or 5% by weight (¶ [0087]).

### ***Allowable Subject Matter***

#### **2. Claim 9 is allowed.**

The following is a statement of reasons for the indication of allowable subject matter:

The instant application claims the copolymer blend of claim 9 has a melting of above 140°C. These limitations are not obvious over the prior art. Cheng et al. disclose the melting point of their polymer blend has an upper point of 110°C. Therefore, based on the nearest prior art, one would not expect a copolymer blend as recited in Applicant's claim 1 to have a melting point above 140°C.

### ***Response to Arguments***

3. Applicant argues, “Stahl specifically discourages the use of polymers made from ZN catalysts” (Remarks, Page 5).

Art Unit: 1794

4. "Zucchelli does not remedy the deficiencies of Stahl and actually teaches away from the combination with Stahl" (Remarks, Pg 6)
5. "Sartori's material is a Ziegler-Natta produced material (Remarks, Page 7).

EXAMINER'S RESPONSE: Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Terminal Disclaimer***

The terminal disclaimer filed on March 26, 2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 11/629,764 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1794

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE T. GUGLIOTTA whose telephone number is (571)270-1552. The examiner can normally be reached on M - F 8:30 - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner, Art Unit 1794

NICOLE T. GUGLIOTTA  
Examiner  
Art Unit 1794